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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,846	02/18/2005	Lars Lietzau	MERCK-2972	1895

23599 7590 11/28/2006

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EXAMINER

WU, SHEAN CHIU

ART UNIT PAPER NUMBER

1756

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claim 16 provides for the use of cyclopenta[b]naphthalene derivatives, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.
2. Claim 16 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 1-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Hornung et al. (US 2003/0091756 or US 6,759,103).

The reference discloses a novel fluorinated cyclopenta(b)naphthalene compounds of formula (I). The liquid crystal mixtures comprising compound of formula (I) have a wide operating temperature range, high optical anisotropy, low viscosity and high absolute dielectric anisotropy. The fluorinated cyclopenta(b)naphthalene are shown by formulae (Ia)-(In) on col. 2 and col. 3. The Scheme 1 shows the synthesis of fluorinated cyclopenta(b)naphthalene (see compounds of Z4-Z8). Further see Schemes 2-7.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hornung et al. as applied to claims 1-19 above, and further in view of Heckmeier et al. (US 20040150633 or equivalent DE 10217273).

Hornung does not disclose the electro-optical light-control element as the present claim. Heckmeier discloses the electro-optical light modulation element comprising an electrode arrangement, at least one element for polarization of the light, and a mesogenic modulation medium in that the light modulation element is operated at a temperature at

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which the mesogenic modulation medium in the unaddressed state is in the isotropic phase (see claim 1 of US '633). Because the present electrooptical light-control element is taught by Heckmeier, it would have been obvious to those skilled in the art to utilize the reference compound of Hornung and apply into the electro-optical light-control element of Heckmeier to arrive at the claimed invention.

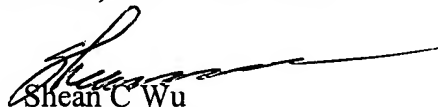
6. It is noted that the present application claims the priority of DE 102 38 999.3 (filed 8/26/02) and 103 24843.9 (filed 6/2/03), which DE-102 38 999.3 has earlier filing date than Hornung (US 6,759,103 filed 9/12/02 in US) but later than the priority of US '103 (DE 10145779 filed 9/17/01). If filing a certified priority document in the application with an English language translation perfects the priority document of this application, it will be potential interference with US 6,759,103.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shean C. Wu whose telephone number is 571-272-1393. The examiner can normally be reached on 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Shean C Wu
Primary Examiner
Art Unit 1756

scw